

FOR QUALIFIED INSTALLER ONLY. This basic Installation Sheet is an initial release. If a complete Operations Manual (for the unit being installed) is required or needed, please refer to the Lancer web site (lancercorp.com) for immediate access, or for your convenience, scan this QR code with a mobile device (app required) for immediate access. Contact Lancer Customer Service for assistance as required.



**TOOLS REQUIRED:** Oetiker Pliers, Tubing Cutters, Wrench, Phillips and Slotted Screwdriver, Precision Cutters



**WARNING** THE DISPENSER IS FOR INDOOR USE ONLY. THIS UNIT IS NOT A TOY. DISPENSER IS NOT INTENDED FOR USE BY PERSONS (INCLUDING CHILDREN) WITH REDUCED PHYSICAL, SENSORY OR MENTAL CAPABILITIES, OR LACK OF EXPERIENCE AND KNOWLEDGE, UNLESS THEY HAVE BEEN GIVEN INSTRUCTION CONCERNING USE OF THE APPLIANCE BY A PERSON RESPONSIBLE FOR THEIR SAFETY. UNIT IS NOT DESIGNED TO DISPENSE DAIRY PRODUCTS. THE MIN/MAX AMBIENT OPERATING TEMPERATURE FOR THE DISPENSER IS 40°F TO 90°F (4°C TO 32°C).

**ADVERTENCIA** EL DISPENSADOR SÓLO DEBE USARSE EN INTERIORES. ESTA UNIDAD NO ES UN JUGUETE. ESTA UNIDAD NO ESTÁ DESTINADA AL USO POR PARTE DE PERSONAS (INCLUSO NIÑOS) CON CAPACIDAD FÍSICA, SENSORIAL O MENTAL REDUCIDA, O SIN EXPERIENCIA Y CONOCIMIENTOS SUFICIENTES, A MENOS QUE UNA PERSONA RESPONSABLE DE SU SEGURIDAD LES HAYA DADO SUPERVISIÓN O CAPACITACIÓN EN EL USO DE LA UNIDAD. ESTA UNIDAD NO HA SIDO DISEÑADA PARA SUMINISTRAR PRODUCTOS LÁCTEOS. LA TEMPERATURA AMBIENTE OPERATIVA MÍNIMA / MÁXIMA PARA EL DISPENSADOR ES DE 40°F A 90°F (4°C A 32°C).

**AVERTISSEMENT** LE DISTRIBUTEUR EST DESTINÉ À UN USAGE À L'INTÉRIEUR SEULEMENT. CET APPAREIL N'EST PAS UN JOUET. IL NE DEVRAIT PAS ÊTRE UTILISÉ PAR DES ENFANTS OU DES PERSONNES INFIRMES SANS SURVEILLANCE. CET APPAREIL N'EST PAS DESTINÉ À UN USAGE PAR DES PERSONNES (Y COMPRIS LES ENFANTS) AYANT DES CAPACITÉS PHYSIQUES, SENSORIELLES OU MENTALES RÉDUITES, OU MANQUANT D'EXPÉRIENCE ET DE CONNAISSANCES, À MOINS QU'ELLES OBTIENNENT DE LA SURVEILLANCE OU DES INSTRUCTIONS AU SUJET DE L'UTILISATION DE L'APPAREIL DE LA PART D'UNE PERSONNE CHARGÉE DE LEUR SÉCURITÉ. CET APPAREIL N'EST PAS CONÇU POUR DISTRIBUER DES PRODUITS LAITIERS. LA TEMPÉRATURE DE SERVICE AMBIANTE MINIMUM/MAXIMUM POUR LE DISTRIBUTEUR EST DE 40°F À 90°F (4°C À 32°C).

## 1. INSTALLATION

### 1.1 RECEIVING THE UNIT

Each unit is completely tested under operating conditions and thoroughly inspected before shipment. At time of shipment, the carrier accepts the unit and any claim for damage(s) must be made with carrier. Upon receiving units from the delivering carrier, carefully inspect carton for visible indication(s) of damage. If damage exists, have carrier note same on bill of lading and file a claim with the carrier.

### 1.2 UNPACKING



**WARNING** TO AVOID PERSONAL INJURY OR DAMAGE, DO NOT ATTEMPT TO LIFT A UNIT WITHOUT HELP. FOR HEAVIER UNITS, USE OF A MECHANICAL LIFT MAY BE APPROPRIATE. UNITS ARE EQUIPPED WITH AUTOMATIC AGITATION. THE UNIT MAY ACTIVATE UNEXPECTEDLY. DO NOT PLACE HANDS, OR FOREIGN OBJECTS INTO THE ICE STORAGE COMPARTMENT. UNPLUG DISPENSER FROM THE POWER SOURCE, WHEN UNIT IS BEING SERVICED, CLEANED, OR SANITIZED.

**ADVERTENCIA** EVITE LAS LESIONES PERSONALES, NO TRATE DE LEVANTAR EL DISPENSADOR SIN AYUDA. PARA LOS DISPENSADORES MÁS PESADOS USE UN ELEVADOR MECÁNICO. LAS UNIDADES EQUIPADAS CON AGITACIÓN AUTOMÁTICA SE ACTIVAN REPENTINAMENTE. NO PONGA LAS MANOS NI OBJETOS EXTRANOS EN EL COMPARTIMIENTO DE ALMACENAMIENTO DE HIELO. DESENCHUFE EL DISPENSADOR DURANTE TAREAS DE SERVICIO, LIMPIEZA Y ESTERILIZACIÓN.

**AVERTISSEMENT** POUR ÉVITER DES BLESSURES OU DES DOMMAGES, N'ESSEYER PAS DE SOULEVER UNE UNITÉ SANS AIDE. POUR LES UNITÉS PLUS LOURDES, L'UTILISATION D'UN ASCENSEUR MÉCANIQUE PEUT ÊTRE APPROPRIÉE. LES UNITÉS SONT ÉQUIPÉES D'UNE AGITATION AUTOMATIQUE. L'UNITÉ PEUT S'ACTIVER DEMAINÈRE INATTENDUE. NE PLACEZ PAS LES MAINS, OU DES CORPS ÉTRANGERS DANS LE COMPARTIMENT DE STOCKAGE DE GLACE. DÉBRANCHEZ LE DISTRIBUTEUR DE LA SOURCE D'ALIMENTATION EN ÉLECTRICITÉ QUAND L'UNITÉ EST ENTRETENUE, NETTOYÉE OU ASEPTISÉE.

- The Lancer ice beverage dispenser is shipped in a corrugated shipping carton. Remove the corrugated shipping carton from the unit.
- Remove parts from the ice compartment.
- Inspect unit and parts for concealed damage(s). If damage exists, notify delivering carrier and file claim against same.



### 1.3 SELECTING LOCATION



**CAUTION** THE SYRUP INLET TUBE ASSEMBLIES SHIPPED WITH THE INSTALLATION KIT ARE EIGHT (8) FEET (2.4 M) LONG. THESE LINES CAN BE EXTENDED UP TO A MAXIMUM OF 12 FEET (3.7 M). THE MAXIMUM HEIGHT OF THE PUMPS ABOVE THE LOWEST BIB PACKAGE SHOULD NOT EXCEED EIGHT (8) FEET (2.4 M). IF EITHER THE HEIGHT OF PUMPS OR LENGTH OF INLET LINE LIMITATIONS IS EXCEEDED, REMOTE SYRUP PUMPS OR PRESSURIZED SYRUP CONTAINERS SHOULD BE USED. COUNTER CUT OUT MUST BE ACCURATE!

**PRECAUCIÓN** LAS ASAMBLEAS DE TUBOS DE JARABE DE ENTRADA ENVÍAN CON EL KIT DE INSTALACIÓN SON OCHO (8) PIES (2,4 M) DE LARGO. THESE LINES PUEDE AMPLIARSE HASTA UN MÁXIMO DE 12 PIES (3.7 M). LA ALTURA MÁXIMA DE LAS BOMBAS SOBRE LAS BAJO PAQUETE BIB NO DEBERÍA EXCEDER DE OCHO (8) PIES (2,4 M). SI YA LA ALTURA DE BOMBAS O LONGITUD DE ENTRADA DE LÍNEA DE LIMITACIONES EXCEDE, BOMBAS DE JARABE REMOTO O RECIPIENTES A PRESIÓN JARABE DEBEN ESTAR UTILIZADO. CONTADOR CUT OUT DEBEN SER EXACTOS!

**ATTENTION** ENSEMBLES DE TUBES SIROP D'ADMISSION LIVRÉ AVEC LE KIT D'INSTALLATION HUIT (8) PIEDS (2,4 M) DE LONG. THESE LINES PEUVENT ÊTRE PROLONGÉE JUSQU'À UN MAXIMUM DE 12 PIEDS (3,7 M). LA HAUTEUR MAXIMALE DES POMPES DESSUS DE LA BAS FORFAIT BIB DEVRAIT PAS DÉPASSER HUIT (8) PIEDS (2,4 M). SI L'LA HAUTEUR DE POMPES OU LONGUEUR DE L'ENTRÉE LINE LIMITATIONS EST DÉPASSÉE, POMPES DE SIROP DE DISTANCE OU CONTENEURS DE SIROP DE SOUS PRESSION DOIT ÊTRE UTILISÉ. COMPTEUR CUT OUT DOIT ÊTRE PRÉCIS!

- A. Select a level, well ventilated, accessible location convenient to water and electric supply. **The selected location should be able to support the weight of the unit\* being installed after counter cut out\*\* is made.**

\* **Series 2200**, 225 pounds (102.3 kg); **Series 2300/2400**, 360 pounds (163.6 kg); and **Series 23308**, 400 pounds (181.8 kg)

\*\* **Series 2200**, 15 1/4" x 23 1/4"; **Series 2300**, 23 1/4" x 23 1/4"; and, **Series 23308**, 23 1/4" x 30 1/4"

### 1.4 CONNECTING TO ELECTRICAL POWER



**WARNING** CHECK THE DISPENSER SERIAL NUMBER PLATE FOR CORRECT ELECTRICAL REQUIREMENTS OF UNIT. DO NOT PLUG INTO A WALL ELECTRICAL OUTLET UNLESS THE CURRENT SHOWN ON THE SERIAL NUMBER PLATE AGREES WITH LOCAL CURRENT AVAILABLE. THIS UNIT MUST BE PROPERLY ELECTRICALLY GROUNDED TO AVOID POSSIBLE FATAL ELECTRICAL SHOCK OR SERIOUS INJURY TO THE OPERATOR. THE POWER CORD HAS A THREE-PRONG GROUNDED PLUG. IF A THREE-HOLE GROUNDED ELECTRICAL OUTLET IS NOT AVAILABLE, USE AN APPROVED METHOD TO GROUND THE UNIT. FOLLOW ALL LOCAL ELECTRICAL CODES WHEN MAKING CONNECTIONS. EACH POWER SUPPLY MUST HAVE A SEPARATE ELECTRICAL CIRCUIT. DO NOT USE EXTENSION CORDS. DO NOT "GANG" TOGETHER WITH OTHER ELECTRICAL DEVICES ON THE SAME OUTLET. THE KEYSWITCH DOES NOT DISABLE THE LINE VOLTAGE TO THE TRANSFORMER PRIMARY. ALWAYS DISCONNECT POWER TO THE DISPENSER BEFORE ATTEMPTING ANY INTERNAL MAINTENANCE. ONLY QUALIFIED PERSONNEL SHOULD SERVICE INTERNAL COMPONENTS OF ELECTRICAL CONTROL HOUSING. MAKE SURE THAT ALL WATER LINES ARE TIGHT AND UNITS ARE DRY BEFORE MAKING ANY ELECTRICAL CONNECTIONS!

**ADVERTENCIA ELÉCTRICA** VERIFIQUE LA PLACA CON EL NÚMERO DE SERIE DEL DISPENSADOR, DONDE ENCONTRARÁ LOS REQUISITOS ELÉCTRICOS CORRECTOS DE LA UNIDAD. NO ENCHUFE LA UNIDAD EN UN TOMACORRIENTE DE PARED A MENOS QUE LA CORRIENTE INDICADA EN LA PLACA CON EL NÚMERO DE SERIE CONCUERDE CON LA CORRIENTE LOCAL DISPONIBLE. ESTA UNIDAD DEBE ESTAR DEBIDAMENTE CONECTADO A TIERRA PARA EVITAR POSIBLES CHOQUES ELÉCTRICOS MORTALES O LESIONES GRAVES AL OPERADOR. AL HACER LAS CONEXIONES, RESPETE TODOS LOS CÓDIGOS ELÉCTRICOS LOCALES. CADA DISPENSADOR DEBE TENER UN CIRCUITO ELÉCTRICO INDEPENDIENTE. NO USE EXTENSIONES CON ESTA UNIDAD. NO LA CONECTE JUNTO CON OTROS DISPOSITIVOS ELÉCTRICOS AL MISMO TOMACORRIENTE. EL INTERRUPTOR DE LLAVE NO CORTA EL VOLTAJE DE LÍNEA AL TRANSFORMADOR PRIMARIO. DESCONECTE SIEMPRE LA ALIMENTACIÓN ELÉCTRICA A LA UNIDAD PARA EVITAR LESIONES PERSONALES ANTES DE TRATAR DE REALIZAR TAREAS DE MANTENIMIENTO. EL SERVICIO DE LOS COMPONENTES INTERNOS DE LA CAJA DE CONTROL ELÉCTRICO DEBE CONFIARSE EXCLUSIVAMENTE A PERSONAL CALIFICADO. ASEGÚRESE DE QUE TODAS LAS LÍNEAS DE AGUA ESTÉN AJUSTADAS Y LAS UNIDADES ESTÉN SECAS ANTES DE HACER CONEXIONES ELÉCTRICAS.

**AVERTISSEMENT ÉLECTRIQUE** EXAMINEZ LA PLAQUE DE NUMÉRO DE SÉRIE DU DISTRIBUTEUR POUR CONNAÎTRE LES BONNES EXIGENCES EN MATIÈRE D'ÉLECTRICITÉ POUR L'APPAREIL. NE LE BRANCHEZ PAS À UNE PRISE ÉLECTRIQUE MURALE À MOINS QUE LE COURANT INDIQUÉ SUR LA PLAQUE DE NUMÉRO DE SÉRIE CORRESPONDE AU COURANT LOCAL DISPONIBLE. L'UNITÉ DOIT ÊTRE MISE À LA TERRE ÉLECTRIQUEMENT POUR ÉVITER UNE DÉCHARGE ÉLECTRIQUE MORTELLE OU DES BLESSURES GRAVES POSSIBLES À L'OPÉRATEUR. LE BLOC D'ALIMENTATION DOIT ÊTRE MIS À LA TERRE ÉLECTRIQUEMENT CORRECTEMENT POUR ÉVITER DES BLESSURES GRAVES OU UNE DÉCHARGE ÉLECTRIQUE MORTELLE. LE CORDON D'ALIMENTATION A UNE FICHE À TROIS BRANCHES MISE À LA TERRE. SI AUCUNE PRISE DE COURANT ÉLECTRIQUE À TROIS TROUS N'EST DISPONIBLE, UTILISEZ UNE MÉTHODE APPROUVÉE POUR METTRE L'UNITÉ À LA TERRE. RESPECTEZ TOUS LES CODES ÉLECTRIQUES LOCAUX LORSQUE VOUS FAITES DES CONNEXIONS. CHAQUE SOURCE D'ALIMENTATION DOIT AVOIR UN CIRCUIT ÉLECTRIQUE SÉPARÉ. N'UTILISEZ PAS DE CORDONS PROLONGATEURS. NE BRANCHEZ PAS PLUSIEURS APPAREILS ÉLECTRIQUES À LA MÊME PRISE DE COURANT. L'INTERRUPTEUR À CLÉ NE COUPE PAS LA TENSION SECTEUR AU TRANSFORMATEUR PRIMAIRE. DÉCONNECTEZ TOUJOURS L'ALIMENTATION EN ÉLECTRICITÉ À LA DISTRIBUTRICE AVANT DE FAIRE DE L'ENTRETIEN INTERNE. SEUL LE PERSONNEL QUALIFIÉ DEVRAIT FAIRE L'ENTRETIEN/ LA RÉPARATION DES COMPOSANTS INTERNES DANS LE LOGEMENT DES COMMANDES ÉLECTRIQUES. ASSUREZ-VOUS QUE TOUTES LES CONDUITES D'EAU SONT ÉTANCHES ET QUE LES APPAREILS SONT SECS AVANT DE FAIRE DES CONNEXIONS ÉLECTRIQUES!

- A. A standard 15A, 110V, 60Hz single phase electrical power outlet with a ground connector is required for unit operation.
- B. Check the dispenser serial number plate for correct electrical requirements of unit. Do not plug into wall electrical outlet unless the current shown on the serial number plate agrees with local current available.
- C. Route the power supply cord to a grounded electrical outlet of the proper voltage and amperage rating, and plug in the unit.

## 1.5 CONNECTING TO WATER SUPPLY LINES



**CAUTION** USE A SHARP KNIFE, RAZOR BLADE, OR TUBE CUTTER TO CUT TUBING. TUBING CUT WITH A SAW WILL RESULT IN PLASTIC SHAVINGS WHICH WILL PLUG THE FLOW CONTROLS IN THE DISPENSING VALVE. A FILTER IN THE WATER LINE MUST BE USED IF THE WATER SUPPLY CONTAINS ANY APPRECIABLE AMOUNT OF SILT, SAND, OR ANY OTHER DEBRIS. FAILURE TO DO SO CAN RESULT IN EQUIPMENT DAMAGE.

FAILURE TO LIMIT WATER PRESSURE TO 50 PSI (0.345 MPA) WILL RESULT IN IMPROPER PERFORMANCE OF THE DISPENSER - INSTALL WATER REGULATOR IF NECESSARY.

THE WATER SUPPLY MUST BE PROTECTED BY MEANS OF AN AIR GAP, A BACKFLOW PREVENTION DEVICE (LOCATED UPSTREAM OF THE CO<sub>2</sub> INJECTION SYSTEM) OR ANOTHER APPROVED METHOD TO COMPLY WITH NSF STANDARDS. A LEAKING INLET WATER CHECK VALVE WILL ALLOW CARBONATED WATER TO FLOW BACK THROUGH THE PUMP (WHEN IT IS SHUT OFF), AND CONTAMINATE THE WATER SUPPLY. A BACKFLOW PREVENTION DEVICE MUST COMPLY WITH ASSE AND LOCAL STANDARDS. IT IS THE RESPONSIBILITY OF THE INSTALLER TO ENSURE COMPLIANCE.

A SCREEN OF AT LEAST 100 MESH [100 STRANDS PER 25MM (ONE INCH)] SHALL BE INSTALLED IMMEDIATELY UPSTREAM OF ALL CHECK VALVE TYPE BACKFLOW PREVENTERS USED FOR WATER SUPPLY PROTECTION. THE SCREEN SHALL BE ACCESSIBLE AND REMOVABLE FOR CLEANING OR REPLACEMENT.

A FILTER IN THE WATER LINE MUST BE USED IF THE WATER SUPPLY CONTAINS ANY APPRECIABLE AMOUNT OF SILT, SAND, OR ANY OTHER DEBRIS. FAILURE TO DO SO CAN RESULT IN EQUIPMENT DAMAGE.

DO NOT OPERATE CARBONATOR PUMP WITH WATER SUPPLY SHUT OFF

- A. An adequate potable water supply must be provided. The water supply line must be at least a 3/8 inches (9.525 mm) pipe with a minimum of 20 PSI (0.138 MPA) line pressure, but not exceeding a maximum of 50 PSI (0.345 MPA). Water pressure exceeding 50 PSI (0.345) must be reduced to 50 PSI (0.345 MPA) with a pressure regulator.
  1. Off tastes and excessive silt, sand, or iron require that a water filter be installed in the water supplying the Carbonator. The water filter should be checked periodically, as required by local conditions.
  2. Do not connect to a heated (hot) water source or a water source supplying soft water. This will cause excessive foaming.
- B. The Carbonator Pump is equipped with a Strainer and a Tee on the outlet side for a plain water Valve (if required), but a water supply containing any appreciable quantity of silt, fine sand, or other debris requires a Filter ahead of the Unit. The Filter cartridge must be cleaned periodically, depending upon the condition of the water. Failure to do so may starve the Pump and cause it to burn out; thereby, voiding the equipment warranty.

## 1.6 CONNECTING TO SYRUP CONTAINERS

- A. When the unit is used in the Coca-Cola Company installations, the syrup containers are to be attached as outlined in the appropriate Coca-Cola Company Service Manual.
- B. For other installations, the syrup containers, sold as an accessory, are stainless steel with a capacity of five gallons. They are equipped with a CO<sub>2</sub> gas quick disconnect fitting and a syrup quick disconnect fitting. The standard syrup outlet is a 1/4 inch (6.350 mm) male flare (MF). A low pressure regulator manifold (an accessory) may be mounted on the wall above the syrup tanks.
- C. The inlets on the unit, located on the left side of the machine, are tagged or coded to the proper valves. When making the connection to these inlets, provide a good, tight, leak-free joint to prevent twisting the tubing.

## 1.7 INSTALLATION OF THE UNIT

- A. Inspect the counter location where the unit is to be installed. Verify that the counter is strong enough to safely support the weight of the unit being installed (see Section 1.3), after the cutout for the unit is made.
- B. Verify that the unit will fit in the desired location. See Section 1.3 for the counter cutout size for the unit.

**NOTE:** Remember that the unit can extend up to 23 inches (58.42 cm) below the counter, including the shipping risers, which Lancer recommends be left attached to the unit. Should the dispenser ever require removal, the shipping risers will protect the inlet tubes from being damaged.

- C. After the counter cutout is complete, the unit may be lowered into the counter.
- D. When the unit is properly located in the counter, the rim **MUST** be sealed to the counter using an approved silicone sealant. **THIS STEP IS IMPERATIVE!**

## 1.8 CONNECTING CO2

**CAUTION** CARBON DIOXIDE (CO2) IS A COLORLESS, NONCOMBUSTIBLE GAS WITH A LIGHT PUNGENT ODOR. HIGH PERCENTAGES OF CO2 MAY DISPLACE OXYGEN IN THE BLOOD. PROLONGED EXPOSURE TO CO2 CAN BE HARMFUL. PERSONNEL EXPOSED TO HIGH CONCENTRATIONS OF CO2 GAS WILL EXPERIENCE TREMORS WHICH ARE FOLLOWED BY A LOSS OF CONSCIOUSNESS AND SUFFOCATION. IF A CO2 GAS LEAK IS SUSPECTED, IMMEDIATELY VENTILATE THE CONTAMINATED AREA BEFORE ATTEMPTING TO REPAIR THE LEAK. STRICT ATTENTION MUST BE OBSERVED IN THE PREVENTION OF CO2 GAS LEAKS IN THE ENTIRE CO2 AND SOFT DRINK SYSTEM.

UNDER NO CIRCUMSTANCE SHOULD CO2 PRESSURE EXCEED 80 PSI (0.551 MPA). PRESSURE ABOVE THIS LIMIT WILL RESULT IN DAMAGE TO THE SYRUP PUMPS. SHOULD REMOTE SYRUP PUMPS FAIL TO OPERATE PROPERLY AT 70 PSI (0.483 MPA), THE CO2 PRESSURE MAY BE REDUCED TO A MINIMUM PRESSURE OF 60 PSI (0.431 MPA), BUT NO LOWER. TO AVOID POSSIBLE PERSONAL INJURY OR PROPERTY DAMAGE, DO NOT ATTEMPT TO REMOVE SYRUP TANK COVER UNTIL CO2 PRESSURE HAS BEEN RELEASED FROM TANK.

TO AVOID PERSONAL INJURY AND/OR PROPERTY DAMAGE, ALWAYS SECURE CO2 CYLINDERS IN AN UPRIGHT POSITION WITH A SAFETY CHAIN TO PREVENT CYLINDERS FROM FALLING OVER. SHOULD THE VALVE BECOME ACCIDENTALLY DAMAGED OR BROKEN OFF, A CO2 CYLINDER CAN CAUSE SERIOUS PERSONAL INJURY.

**PRECAUCIÓN** EL ANHÍDRIDO CARBÓNICO (CO2) ES UN GAS INCOLORO, NO COMBUSTIBLE, CON UN OLOR PUNGENTE LIGERO. ALTOS PORCENTAJES DE CO2 EN LA SANGRE PUEDEN DESPLAZAR EL OXÍGENO EN LA SANGRE. LA EXPOSICIÓN PROLONGADA AL CO2 PUEDE SER NOCIVA. EL PERSONAL EXPUESTO A CONCENTRACIONES ALTAS DE CO2 SUFRE TEMBLORES SEGUIDOS DE LA PÉRDIDA DE LA CONSCIENCIA Y SOFOCACIÓN. SI SE SOSPECHA QUE EXISTE UNA PÉRDIDA DE CO2, VENTILE EL ÁREA CONTAMINADA ANTES DE TRATAR DE REPARAR LA PÉRDIDA. HAY QUE PRESTAR SUMA ATENCIÓN PARA EVITAR PÉRDIDAS DE CO2 EN TODO EL SISTEMA DE CO2 Y DE BEBIDAS GASEOSAS.

BAJO NINGUNA CIRCUNSTANCIA DEBE SUPERAR LA PRESIÓN CO2 80 PSI (0.551 MPA). PRESIÓN ENCIMA DE ESTE LÍMITE PUEDE CAUSAR DAÑOS A LAS BOMBAS DE JARABE. DEBEN BOMBAS DE JARABE REMOTO IMPIDIENDO SU CORRECTO FUNCIONAMIENTO A 70 PSI (0.483 MPA), LA PRESIÓN DEL CO2 SE PUEDEN REDUCIR A UNA PRESIÓN MÍNIMA DE 60 PSI (0.431 MPA), PERO NO INFERIOR. PARA EVITAR LESIONES PERSONALES O DAÑOS A LA PROPIEDAD, NO INTENTE PARA REMOVER LA TAPA DEL TANQUE DE JARABE HASTA QUE LA PRESIÓN DEL CO2 HA SIDO LIBERADO DE TANQUE.

PARA EVITAR INJURY AND PERSONAL / O DAÑOS A LA PROPIEDAD, SIEMPRE LAS BOTELLAS DE CO2 SEGURAS EN POSICIÓN VERTICAL CON UNA CADENA DE SEGURIDAD PARA EVITAR CILINDROS CAIGA. SI LA VÁLVULA QUEDAN ACCIDENTALMENTE DAÑADO O ROTO OFF, UN CILINDRO CO2 PUEDE CAUSAR GRAVES LESIONES PERSONALES.

**ATTENTION** LE DIOXYDE DE CARBONE (CO2) EST PLUS LOURD QUE L'AIR ET DÉPLACE L'OXYGÈNE. LE CO2 EST UN GAZ INCOLORE ET INCOMBUSTIBLE, AYANT UNE ODEUR UN PEU ÂCRE. DES CONCENTRATIONS FORTES DE CO2 PEUVENT DÉPLACER L'OXYGÈNE DANS LE SANG. UNE EXPOSITION PROLONGÉE AU CO2 PEUT ÊTRE NOCIVE. LE PERSONNEL EXPOSÉ À DE FORTES CONCENTRATIONS DE CO2 GAZEUX ÉPROUVERA DES TREMBLEMENTS, SUIVIS RAPIDEMENT D'UNE PERTE DE CONSCIENCE ET DE SUFFOCATION. ON DOIT FAIRE TRÈS ATTENTION DE PRÉVENIR LES FUITES DE CO2 GAZEUX DANS LE SYSTÈME ENTIER DE CO2 ET DE BOISSON GAZEUSE. SI ON SUSPECTE QU'IL Y A UNE FUITE DE CO2 GAZEUX, AÉREZ LE SECTEUR CONTAMINÉ IMMÉDIATEMENT AVANT D'ESSAYER DE RÉPARER LA FUITE.

DANS AUCUN CAS, PRESSION DE CO2 DÉPASSER 80 PSI (0,551 MPA). PRESSION DESSUS DE CETTE LIMITE ENTRAÎNERA DES DOMMAGES À LA POMPE DE SIROP. DEVRAIENT POMPES DE SIROP DE DISTANCE EMPÊCHER DE FONCTIONNER NORMALEMENT AT 70 PSI (0,483 MPA), LA PRESSION DE CO2 PEUT ÊTRE RÉDUITE À UNE PRESSION DE MINIMUM DE 60 PSI (0,431 MPA), MAIS PAS INFÉRIEURE. POUR ÉVITER LES BLESSURES POSSIBLE OU DES DOMMAGES, DO NOT ATTEMPT POUR RETIRER LE SIROP TANK COVER TANT QUE LA PRESSION DE CO2 A ÉTÉ LIBÉRÉ DE TANK.

POUR ÉVITER INJURY AND PERSONNEL / OU DES DOMMAGES, TOUJOURS FIXER UN BOUTEILLES DE CO2 EN POSITION VERTICALE AVEC UNE CHAÎNE DE SÉCURITÉ POUR EMPÊCHER TOMBE DE BOUTEILLES. ACCIDENTELLEMENT DEVENIR LE ROBINET ENDOMMAGÉ OU CASSÉ OFF PEUT PROVOQUER UNE BOUTEILLE CO2 BLESSURES GRAVES.



A. ICDs are externally carbonated units. Install carbonator per manufacturer's instructions.

1. Route tubing through cutout in counter. Leave 12 inches (30 cm) of extra tubing length below counter for servicing and moving the dispenser.
2. Position the CO2 gas tank in location. Assemble high pressure regulator to CO2 gas tank and run jumper line to low pressure regulator. Attach the CO2 gas line to the carbonator by attaching the line from the high pressure regulator to the single check valve marked "gas" on top of the carbonator tank. The setting of the high pressure CO2 gas regulator should be 90 PSI to 110 PSI.



**WARNING** DO NOT TURN ON THE CO2 SUPPLY AT THIS TIME.

**ADVERTENCIA** NO CONECTE TODAVÍA LA ALIMENTACIÓN DE CO2.

**AVERTISSEMENT** N'OUVREZ PAS L'ALIMENTATION EN CO2 À CE MOMENT.

3. Position the syrup tanks in the desired location. Attach the CO2 gas lines leading from the low pressure regulator to these tanks. Connect syrup lines from tanks to the appropriate inlets at the right front of the unit. The syrup inlets are identified.
4. Fill with water and pressurize carbonation system per manufacturer's instructions. Actuate each valve until a smooth flow of carbonated water is obtained. Check for leaks.
5. Remove the protective plug from the CO2 manifold (located on top of mini pumps on left side of unit) and connect the CO2 supply line using a 1/4 inch elbow (supplied in installation kit.)
6. If dispenser does not have built in syrup pumps, connect directly to the carbonator CO2 inlet check valve.

**NOTE:** To check for CO2 leaks, close the valve on the CO2 cylinder and observe if the pressure to the system drops with the cylinder valve closed for five (5) minutes. Open the cylinder valve after the check.

7. Mount the water filter assembly (if used) and water regulator in a convenient location.
8. Connect water inlet line to water regulator, to water filter, and then to the water inlet of the carbonator pump on the carbonator.
9. Provide a suitable drain in the plumbing system and attach the one (1) inch (2.54 cm) diameter schedule 40 PVC drains to it. The drip pan drainage outlet is located at the center rear of the unit. The ice water drainage outlet is located at the right front of the unit.
10. Be sure to place the ice trap in the drain outlet inside the ice bin before filling the cabinet with ice. This device holds the ice away from the drain outlet, allowing the ice water to drain properly.
11. Plug in the transformer box to a standard 15 AMP, 110 VAC, single phase outlet. The unit will internally convert the 110 VAC to 24 VAC.

## 1.9 OTHER



**CAUTION** POURING HOT WATER INTO DRAIN MAY CAUSE THE DRAIN TUBE TO COLLAPSE. ALLOW ONLY LUKEWARM OR COLD WATER TO ENTER DRAIN TUBE. POURING COFFEE, TEA, AND LIKE SUBSTANCES INTO DRAIN MAY CAUSE THE DRAIN TUBE TO BECOME CLOGGED WITH COFFEE OR TEA GROUNDS, OR OTHER SOLID PARTICLES.

**PRECAUCIÓN** VERTIENDO AGUA CALIENTE EN DRENAJE PUEDE CAUSAR EL TUBO DE DRENAJE AL COLAPSO. PERMITIR SÓLO AGUA TIBIA O FRÍA PARA ENTRAR TUBO DE DRENAJE. VERTER EL CAFÉ, EL TÉ Y SUSTANCIAS COMO EN EL DESAGÜE PUEDE CAUSAR EL TUBO DE DRENAJE A OBSTRUIRSE CON CAFÉ O TÉ MOTIVOS U OTROS PARTÍCULAS SÓLIDAS

**ATTENTION** POURING EAU CHAUDE DANS VIDANGE PEUT PROVOQUER LE TUBE DE VIDANGE À S'EFFONDRE. AUTORISER UNIQUEMENT EAU TIÈDE OU FROIDE POUR ENTRER TUYAU DE VIDANGE. VERSER LE CAFÉ, LE THÉ ET DES SUBSTANCES COMME DANS LE DRAIN PEUT PROVOQUER LE TUBE DE VIDANGE À S'OBSTRUER AVEC CAFÉ OU THÉ MOTIFS OU AUTRES PARTICULES SOLIDES

## 2. INSTALLATION OF VALVES (LMV, LEV® OR VOLUMETRIC)

- 2.1 **Model 100** valves are factory preset for a flow rate of 3.0 ounces per second; an adjustment may be required.
- 2.2 **Model 145** valves are factory preset for a flow rate of 4.5 ounces per second; an adjustment may be required.
- 2.3 **Model 150 (Volumetric)** valves are preset for flows rates of 1.5 oz/sec, 2.25 oz/sec or 3.0 oz/sec based on valve part number. A hand held programmer (Lancer PN 52-1420/02) is required to set ratio on Volumetric Valves.
- 2.4 Refer to Lancer web site (Installation Manuals 28-0027 for LMV/LEV valves and 28-0301 for Volumetric valves) for information on the following: Installation, Setting flow rate, Setting ratio, Cleaning, Sanitizing, and Troubleshooting.

## 3. CLEANING AND SANITIZING INSTRUCTIONS



**WARNING** IF A POWDER SANITIZER IS USED, DISSOLVE IT THOROUGHLY WITH HOT WATER PRIOR TO ADDING TO THE SYRUP SYSTEM. ENSURE SANITIZING SOLUTION IS REMOVED FROM THE DISPENSER AS INSTRUCTED. AVOID GETTING SANITIZING SOLUTION ON CIRCUIT BOARDS. DO NOT USE STRONG BLEACHES OR DETERGENTS; THESE CAN DISCOLOR AND CORRODE VARIOUS MATERIALS. DO NOT USE METAL SCRAPERS, SHARP OBJECTS, STEEL WOOL, SCOURING PADS, ABRASIVES, OR SOLVENTS ON THE DISPENSER. DO NOT USE HOT WATER ABOVE 140° F (60° C). THIS CAN DAMAGE THE DISPENSER.

**ADVERTENCIA** SI SE USA UN HIGIENIZADOR EN POLVO, DISUÉLVALO BIEN EN AGUA ANTES DE AGREGARLO AL SISTEMA DE CONCENTRADO. EL USO DE AGUA CALIENTE CONTRIBUYE A DISOLVER LOS HIGIENIZADORES EN POLVO. ASEGÚRESE DE HABER ELIMINADO LA SOLUCIÓN DE ESTERILIZACIÓN DEL DISPENSADOR DE ACUERDO CON LAS INSTRUCCIONES. LOS RESIDUOS DE LA SOLUCIÓN DE ESTERILIZACIÓN REPRESENTAN UN PELIGRO PARA LA SALUD. EVITE QUE LA SOLUCIÓN DE ESTERILIZACIÓN LLEGUE A LAS PLACAS DE CIRCUITOS. NO USE LAVANDINAS NI DETERGENTES QUE PODRÍAN QUITAR EL COLOR Y CORROER DISTINTOS MATERIALES. NO USE RASPADORES METÁLICOS, OBJETOS FILOSOS, LANA DE ACERO, ESTROPAJOS, ABRASIVOS NI SOLVENTES EN EL DISPENSADOR. NO USE AGUA CALIENTE A MÁS DE 140 °F (60 °C). PODRÍA DAÑAR EL DISPENSADOR.

**AVERTISSEMENT** AVANT L'INJECTION DANS LE SYSTÈME, IL FAUDRA QUE LA POUDRE SEPTIQUE SOIT DISSOLUE ENTIÈREMENT DANS CHAUDE. L'EAU CHAUDE PERMETTRA UN MEILLEUR PROCÈS DE DISSOLUTION. SUIVANT LES INSTRUCTIONS JOINTES, IL EST IMPÉRATIF QUE LA SOLUTION SEPTIQUE SOIT ENTIÈREMENT ENLEVÉE. EVITEZ DE METTRE LA SOLUTION EN CONTACT AVEC LES CIRCUITS. N'UTILISEZ PAS DE JAVELLISANTS OU DEDÉTERGENTS FORTS; CEUX-CI PEUVENT DÉCOLORER ET CORRODER DIVERS MATÉRIAUX. N'UTILISEZ PAS DE RACLEURS EN MÉTAL, D'OBJETS POINTUS, DE LAINE D'ACIER, DE TAMPONS À RÉCURER, D'ABRASIFS OU DE SOLVANTS SUR LE DISTRIBUTEUR. N'UTILISEZ PAS DE L'EAU CHAUDE DE PLUS DE 140 DEGRÉS F (60 DEGRÉS C). CECI PEUT ENDOMMAGER LE DISTRIBUTEUR.

### 3.1 GENERAL INFORMATION

**NOTE:** The cleaning and sanitizing procedures provided herein pertain to the Lancer equipment. If other equipment is being cleaned or sanitized, follow the guidelines established for that equipment. Water lines are not to be disconnected during the cleaning and sanitizing of syrup lines to avoid contamination. Please note that a fresh water rinse cannot follow sanitization of equipment. Purge only with the end use product. This is an NSF requirement.

- A. Lancer equipment (new or reconditioned) is shipped from the factory cleaned and sanitized in accordance with NSF guidelines. The operator of the equipment must provide continuous maintenance as required by this manual and/or state and local health department guidelines to ensure proper operation and sanitation requirements are maintained.
- B. Cleaning and sanitizing should be accomplished only by trained personnel. Sanitary gloves are to be used during cleaning and sanitizing operations. Applicable safety precautions must be observed. Instruction warnings on the product being used must be followed.
- C. Recommended Preparation of Cleaning Solutions.
  - 1. Cleaning solutions (for example, Ivory Liquid, Calgon, etc.) mixed with clean, potable water at a temperature of 90° to 110° Fahrenheit should be used to clean equipment. The mixture ratio, using Ivory Liquid, is one (1) ounce of cleanser to two (2) gallons of water. A minimum of four (4) gallons of cleaning mixture should be prepared.
  - 2. Any equivalent cleanser may be used as long as it provides a caustic based, non-perfumed, easily rinsed mixture containing at least two (2) percent sodium hydroxide (NaOH).
- D. Recommended Preparation of Sanitizing Solutions.
  - 1. Sanitizing solutions should be prepared in accordance with the manufacturer's written recommendations and safety guidelines. Follow manufacturer's requirements so that the solution provides 100 parts per million (PPM) available chlorine at a temperature of 90°F to 120°F. A minimum of four (4) gallons of sanitizing solution should be prepared.
  - 2. Any sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 100 PPM available chlorine.

### 3.2 AMBIENT PROCESS

- A. The ambient process is the most common method for cleaning and sanitizing dispenser equipment. The detergent should be as recommended and the sanitizer should be low pH (7.0) chlorine solution.
- B. Disconnect syrup containers and remove product from tubing.
- C. Rinse the lines and fittings with clean, room temperature water to remove all traces of residual product.
- D. Fill lines with a low-sudsing, non-perfumed, and easily rinsed detergent solution which has been prepared in accordance with the manufacturer's recommendations. Make sure the lines are completely filled and allow to stand for at least ten (10) minutes.
- E. Flush the detergent solution from the lines with clean water. Continue rinsing until testing with phenolphthalein shows that the rinse water is free of residual detergent.
- F. Fill the lines with a low pH (7.0) chlorine solution containing at least 100 PPM (100 mg/L) available chlorine. Flow sanitizing solution through dispenser until output tests to full 100 PPM concentration. Allow to stand for 15 minutes.
- G. Nozzle/Diffuser Sanitizing (If so equipped) Use the following procedure to sanitize the nozzle housing during the dispenser sanitization procedure.
  - 1. Cleaning Solution - Prepare a low sudsing, non-perfumed, and easily rinsed detergent solution and clean, potable water at a temperature of 90° to 110°F.
  - 2. Sanitizing Solution - Prepare a chlorine solution (less than pH 7.0) containing 100 PPM available chlorine with clean, potable water at a temperature of 90° to 110°F. Any sanitizing solution may be used as long as it is prepared in accordance with the manufacturer's written recommendations and safety guidelines, and provides 100 PPM available chlorine.
  - 3. Cleaning Procedure:
    - a. Disconnect power, so the valve will not be inadvertently activated while cleaning.
    - b. Remove nozzle housing by twisting it counter-clockwise and pulling it down. Wash the nozzle housing with the cleaning solution. Immerse the nozzle housing in a bath of the sanitizing solution for 15 minutes.
    - c. While the parts are in the sanitizing solution, visually inspect around the nozzle mounting area for syrup residue. Using a cloth or nozzle brush and sanitizing solution, clean this area and the bottom of the nozzle body.
    - f. Wipe off the valve shroud assembly and any other areas that may have been splashed by syrup.
    - g. Wearing sanitary gloves, remove, drain, and air dry the nozzle housing.
    - h. Make certain the nozzle o-ring is in place around the nozzle mounting area on the valve. If necessary, slide a new nozzle o-ring (PN 02-0228) onto the nozzle mounting area. (Wear sanitary gloves while handling the o-ring.) If needed, apply 111 lubricant (or another FDA approved lubricant) to the o-ring.
    - i. Wearing sanitary gloves, install the nozzle housing by inserting it into the nozzle body and twisting it clockwise to lock it in place.

- j. Connect power and replace cover.
- H. Reconnect syrup containers and ready Unit for operation.
- I. Draw drinks to refill lines and flush the chlorine solution from the dispenser. Purge only with the end use product. This is an NSF requirement.
- J. Taste the beverage to verify that there is no off taste.

**4. SPECIFIC ICE COOLED MANUALS AVAILABLE ON THE LANCER WEB SITE (BY PART NUMBER)**

Refer to the most current revision level for each manual.

**ICE COOLED 2300 - DROP IN, 28-0058**

**ICE COOLED 2400 - FREE STANDING, 28-0058**

**ICE COOLED 1523, 28-0086**

**ICE COOLED 23308, 28-0225**

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